

REMARKS

In the Office Action sent December 5, 2006, the Examiner rejected claims 1-16 and 18-22, and objected to claim 17. Claims 14 and 18 have been amended, claim 17 has been cancelled, and claims 23 and 24 have been added. Applicants respectfully request reconsideration of pending claims 1-16 and 18-24 in light of the following comments.

I. Claim Rejections – 35 U.S.C. § 103

Claim 1

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. Pub. No. 2003/0222857 (“Abileah”) in view of U.S. Pat. No. 6,975,307 (“Chang”).

Claim 1 recites “wherein said detection circuit maintains said first and second reference voltages substantially constant during said touch condition.”

The Examiner correctly acknowledges the Abileah fails to disclose this element, and cites Chang, particularly Figure 4 and col. 3, lines 10-15 of Chang. The cited portion of Chang discloses that external powers *initially* supply a constant voltage to the X plate and the Y plate of the resistive touch panel. However, Chang also states:

“As the X plate and Y plate are not in contact with each other, the voltage V_c at the node C will [be] V_{ce} , corresponding to a logic HIGH, owing to the resistance of the equivalent resistor R_M across the two plates being infinite. When the X plate is in contact with Y plate, the voltage signal TP at the node C will be much lower than V_{ce} , corresponding to a logic LOW, due to the formation of the loop across the X and Y planes with the finite equivalent resistor R_M produced in the contact thereof. Therefore, a detecting as to whether an external force is exerted on the touch panel can be made according to the voltage signal TP.” (Chang, col. 3, lines 29-40) (emphasis added).

As such, Chang discloses that although the supplied voltage may initially be constant, the voltage does not remain constant during the touch operation, as required by claim 1. In fact, the apparatus in Chang relies upon this voltage change to detect a touch on the screen. Accordingly, claim 1 is allowable over Chang and Abileah.

Claim 2-6

Claims 2-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Abileah in view of Chang and further in view of U.S. Patent No. 6,483,498 (“Colgan”). Claims 2-6 depend on claim 1. Colgan fails to cure the deficiency in the rejection of claim 1 discussed above. As such, claims 2-6 are allowable at least for depending on an allowable claim.

Claims 7-13

Claims 7-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Alileah in view of Chang and further in view of U.S. Patent No. 5,859,392 (“Petty”). Claims 7-13 depend on claim 1. Petty fails to cure the deficiency in the rejection of claim 1. As such, claims 7-13 are allowable at least as depending on allowable claim 1.

Claim 14

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Alileah in view of “A Case Study in Low-Power System-Level Design,” by Wolfe (“Wolfe”). Claim 14 has been amended with the elements of allowable claim 17 to place claim 14 in condition for allowance.

Claim 15 and 16

Claims 15 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Alileah in view of Wolfe and further in view of Colgan. Claims 15 and 16 depend on allowable claim 14 and are allowable at least for that reason.

Claim 18-22

Claims 18-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Colgan in view of Chang and further in view of Petty. Claim 18 recites “wherein a voltage on each of said plurality of wires remains substantially constant during operation of said resistive touch screen.” The Examiner correctly acknowledges that Colgan and Petty fail to disclose this element. However, as noted above in the discussion of claim 1, Chang also fails to disclose that the voltage on each of said plurality of wires remains substantially constant during operation of said resistive touch screen. As such, claim 18 is allowable over Colgan, Chang and Petty. Claims 19-22 depend on claim 18 and are allowable at least for that reason.

II. Allowable Subject Matter

Claim 17 was objected to as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 17 has been incorporated into claim 14 to place claim 14 and the claims dependent thereon in condition for allowance.

III. New Claims

Claims 23 and 24 have been added. Support for new claims 23 and 24 can be found, for example, in paragraph [0052]. Claims 23 and 24 generally correspond to former claim 17, which the Examiner acknowledged contained allowable subject matter. As such, it is respectfully submitted that claims 23 and 24 distinguish over the cited art.

IV. Conclusion

In view of foregoing, Applicants respectfully submit that Examiner's rejections have been overcome, and that the application is in condition for allowance, and such allowance is therefore earnestly requested. Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact the undersigned at the telephone number set forth below.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,
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Dated: March 5, 2007

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